

**REMARKS**

**INTRODUCTION:**

In accordance with the foregoing, claim 49 has been amended. No new matter is being presented, and approval and entry of the foregoing amendments are respectfully requested.

Claims 1-82 are pending and under consideration. Reconsideration is requested.

**ENTRY OF AMENDMENT UNDER 37 C.F.R. §1.116:**

Applicants request entry of this Rule 116 Response because:

(1) the amendment of claim 49 should not entail any further search by the Examiner since no new features are being added or no new issues are being raised; and

(2) the amendment does not significantly alter the scope of the claims and places the application at least into a better form for purposes of appeal. No new features or new issues are being raised.

The Manual of Patent Examining Procedures sets forth in Section 714.12 that "any amendment that would place the case either in condition for allowance or in better form for appeal may be entered." Moreover, Section 714.13 sets forth that "the Proposed Amendment should be given sufficient consideration to determine whether the claims are in condition for allowance and/or whether the issues on appeal are simplified." The Manual of Patent Examining Procedures further articulates that the reason for any non-entry should be explained expressly in the Advisory Action.

**REJECTION UNDER 35 U.S.C. §103:**

In the Office Action at pages 2-3, the Examiner rejects claim 49 under 35 U.S.C. §103 in view of Kashiwagi (U.S. Patent No. 6,069,868) and Kim et al. (U.S. Patent No. 6,449,235). The rejection is respectfully traversed and reconsideration is requested.

On page 3 of the Office Action, the Examiner notes that Kashiwagi does not disclose the

use of a collimating lens. In order to cure this deficiency, the Examiner relies on Kim et al. to disclose the use of a collimating lens. By way of review, Kim et al. discloses a light source 12 generating a light with a wavelength of about 400 nm. The generated 400 nm light is made parallel by a collimator lens 16 and is focused using one of twin objective lenses 20. The collimator lens 16 is used to prevent leakage of the emitted light. (Col. 6, lines 1-10, 28-35, 51-59; FIG .1 of Kim et al.) However, Kim et al. does not suggest that the collimator lens 16 collimates a 780 nm wavelength light emitted from light source 14. Additionally, Kim et al. does not suggest that the collimator lens 16 has a mechanism that both allows focusing using 780 nm wavelength light as well as allows focusing of 400 nm wavelength light without aberration. Lastly, Kim et al. does not disclose that the collimator lens 16 has an element with a divergent power, or that a relationship exists between the divergent power and the twin objective lenses 20.

In contrast, claim 49 recites, among other features, "a collimating lens arranged in an optical path between said light source and said optical element, the collimating lens having a diverging lens with a diverging power," where "the diverging power of the second lens is sufficient to allow the optical element to focus the first light beam with the wavelength of roughly 400 nm onto the first medium with negligible aberration." Since Kashiwagi is not relied upon and does not disclose such a feature, it is respectfully submitted that the combination of Kashiwagi and Kim et al. does not disclose or suggest the invention recited in claim 49.

In the Office Action at pages 4-5, the Examiner rejects claim 60 under 35 U.S.C. §103 in view of Kashiwagi and Zimmerman et al. (U.S. Patent No. 5,636,029). The rejection is respectfully traversed and reconsideration is requested.

On pages 4-5 of the Office Action, the Examiner notes that Kashiwagi does not disclose the use of a collimating lens or a collimating lens having a divergent power. In order to cure this deficiency, the Examiner relies on Zimmerman et al. to disclose the use of a collimating lens having a diverging power. By way of review, Zimmerman et al. discloses a laser beam 102

having a wavelength of 633 nm. After passing through a pinhole assembly 128, the light beam 102 is collimated by a compound cylindrical lens 130 so that the beam 102 no longer expands in a direction of a minor axis 108. Further, as shown in FIG. 6, while the divergence of the light beam 102 is not affected in the major axis 110 by the compound cylindrical lens 130, the light beam 102 is collimated by another compound cylindrical lens 132 so that the light beam 102 no longer expands in the direction of the major axis 110. (Col. 7, lines 30-33, col. 9, lines 30-52 of Zimmerman et al.) However, there is no disclosure that the compound cylindrical lens 130 is used or is usable with both a 633 nm light beam and another light beam having a 400 nm wavelength such as that disclosed in Kashiwagi. There is further no discussion that the compound cylindrical lens 130 has a diverging element that has a power affecting divergence along the major axis as opposed to merely transmitting the light along the major axis.

In contrast, claim 60 recites, among other features, "light sources to emit respective light beams of different wavelengths, wherein one of the wavelengths is less than roughly 500 nm and another one of the wavelengths is more than roughly 500 nm," and "a collimating lens arranged between said light sources and said optical element," where "said collimating lens comprises a surface with a diverging power." Since Kashiwagi is not relied upon and does not disclose such a feature, it is respectfully submitted that the combination of Kashiwagi and Zimmerman et al. does not disclose or suggest the invention recited in claim 60.

Additionally, on page 5 of the Office Action, the Examiner asserts that one of ordinary skill in the art would have been motivated to use the compound cylindrical lenses 130 and 132 in an optical pickup of Kashiwagi in order to limit the traveling path of a light beam to be parallel as to the focusing element so that no aberration is created. However, Zimmerman et al. teaches using the compound cylindrical lenses 130 and 132 to create an elliptical light beam 106 shown in FIG. 5. The elliptical light beam 106 has a width in the minor direction 108 that is twice as large as the circular beam 102 and is eight times as large as the circular beam 102 in the major direction 110. (Col. 9, lines 52-59 of Zimmerman et al.) It is respectfully submitted that such an

elliptical light beam 106, when used in Kashiwagi, would provide an extreme aberration or otherwise be unusable for recording and/or reproducing data using the optical discs 10A, 10B, 10C disclosed in Kashiwagi.

In evaluating whether the prior art suggests changing a design of a primary reference, the suggested change cannot render the primary reference inoperative. Specifically and as noted in MPEP 2143, "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." It is respectfully submitted that the use of the lens 130 and/or 132 in the manner suggested by the Examiner would render the device shown in FIG. 2 of Kashiwagi inoperative, and therefore prevent the use of the optical pickup suggested by Kashiwagi. Since there is no evidence in Zimmerman et al. or Kashiwagi that an elliptical beam should be used in an optical pickup, it is respectfully submitted that, assuming arguendo that the Examiner's characterizations of Kashiwagi and Zimmerman et al. are correct, there is insufficient evidence of a motivation to use the cylindrical lenses 130 and 132 in the device disclosed in Kashiwagi as is required to maintain an obviousness rejection.

On pages 6-7 of the Office Action, the Examiner rejects claim 74 under 35 U.S.C. §103 in view of Kashiwagi, Zimmerman et al., and Kashiwagi (U.S. Patent No. 6,175,548) (hereinafter referred to as Kashiwagi II). The rejection is respectfully traversed and reconsideration is requested.

On pages 4-5 of the Office Action, the Examiner notes that Kashiwagi does not disclose, among other elements, the use of a collimating lens or a collimating lens having a divergent power. In order to cure this deficiency, the Examiner relies on Zimmerman et al. to disclose the use of a collimating lens having a diverging power. However, as noted above in relation to the rejection of claim 60, Zimmerman et al. does not disclose that the compound cylindrical lens 130 is used or is usable with both a 633 nm light beam and another light beam having a 400 nm wavelength such as that disclosed in Kashiwagi or Kashiwagi II. There is further no discussion

that the compound cylindrical lens 130 has a diverging element as opposed to merely allowing the major axis to continue diverging without alteration.

Since neither Kashiwagi nor Kashiwagi II are relied upon as curing the above noted deficiency, it is respectfully submitted that the combination of Kashiwagi, Zimmerman et al., and Kashiwagi II does not disclose or suggest "light sources to emit a light beam of less than roughly 400 nm and another light beam having a wavelength suitable for recording and/or reproducing data with respect to a digital versatile disc," and "a collimating lens arranged between said light source and said optical element," where "said collimating lens comprises a surface with a diverging power" as recited in claim 74.

Lastly, for reasons similar to those set forth above in relation to claim 60, it is respectfully submitted that there is insufficient evidence of a motivation to use the 130 and/or 132 of Zimmerman et al., which creates an elliptical light beam 106, in an optical pickup such as that disclosed in FIG. 2 of Kashiwagi and FIG. 7 of Kashiwagi II as is required to maintain an obviousness rejection since doing so would render both the optical pickups in Kashiwagi and Kashiwagi II inoperative.

#### **STATUS OF CLAIMS NOT REJECTED IN OFFICE ACTION**

On page 8 of the Office Action, the Examiner states that claims 1-48, 50-59, 61-73, and 75-82 are allowed.

#### **CONCLUSION:**

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. Thus, there being no further outstanding objections or rejections, the application is submitted as being in condition for allowance which action is earnestly solicited. At a minimum, this Amendment should be entered

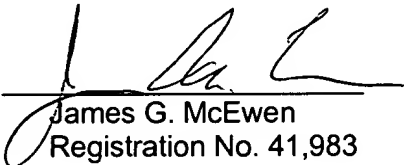
at least for purposes of Appeal as it either clarifies and/or narrows the issues for consideration by the Board.

If the Examiner has any remaining issues to be addressed, it is believed that prosecution can be expedited and possibly concluded by the Examiner contacting the undersigned attorney for a telephone interview to discuss any such remaining issues.

If there are any additional fees associated with the filing of this Response, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: March 19, 2004